composition, as, for instance, in the (Irst example the 01 1 { content of 4k2'7per cent, gradually goes down to 5U)'7 per cent., and iu the second even from HH*^ por cent. to lWT> per cent. There are, that is to sa,y, gases at the commencement of dry distillation richer in 0, whilst at the conclusion of the same more free hydrogen is present. Such phenomena will, however, he manifested likewise in producer working, since, l.he smallest producers are similarly worked ; and wore a largo amount of fuel at a time charged into (.he. producer, gases must similarly result, which tiro very rich in hydrocarbons, whilst later more free hydrogen would bo given rise, In, and then finally periods make their appearance when only little distillation gas can bo given off.

Distillation gases may, therefore, bo expected in practical producer working, which are similar to the most richly and most poorly carbonaceous of those in these tables.

As, however, the giving oil' of distillation gases proceeds tnore rapidly and thoroughly in producers than in coke ovens, in which a small proportion of II is always retained in the coke, one may thus properly ox pee I in the distillation gases of producer working, a poorer average! in carbon Mian in coke oven gasos. In the, selection of gases from the above tablo, which might be regarded as a basis value for the distillation gases occurring in producer working, it is readily apparent that not the 0-riehest gas, but the- moan of all analynen should ho taken as the 0-richest gas ; whilst us the lowest basis value, the C-poorest gas in the table* /.r., No. 7, Sol way (England) --may well be, taken. The composition of the respective gases will then bo as under: •-

C-IHHHYHt (laK<1

C,H1IU, 8-1 per cent,; CII{, ritt'7 per cent.; II, 5(11) per cent. ;

(JO, 8-8 par cent. ; C()a> B'O per cent,; N, nil;

total, *JH> por cent.

(tax.

OwIIn, 4'fi per conl. ; OIL,, H-1'0 pen* emit. ; If, -17'0 per cimt, ; CO, 8*8 per cunt. ; CO* 1"B per cent ; N, rt'fi por cent. ;

total, i)i)-l) per cent; 1 This eumpoHiliuu in given in l hit original.